

**Title: J-UCAS COMMON OPERATING SYSTEM INDUSTRY DAY**

The DARPA Joint Unmanned Combat Air Systems (J-UCAS) Office is hosting an Industry Day on April 20, 2004. This forum will present an overview of a proposed consortium business arrangement for the development of the J-UCAS "Common Operating System" (COS) and specifically a solicitation for the role of integrator/broker. J-UCAS Overview: The Joint Unmanned Combat Air Systems (J-UCAS) program is a joint DARPA/Air Force/Navy effort to demonstrate the technical feasibility, military utility and operational value for a networked system of high performance, weaponized unmanned air vehicles to effectively and affordably prosecute 21st century combat missions, including Suppression of Enemy Air Defenses (SEAD), surveillance, and precision strike within the emerging global command and control architecture. The J-UCAS office is currently managing two air vehicle development programs, the X-45 (Boeing), and the X-47 (Northrop Grumman). The newest piece to the J-UCAS program structure is the Common Systems and Technologies (CST) organization. CST is responsible for all aspects of the system that reach beyond the individual platforms. Common Systems & Technologies Overview: The J-UCAS CST organization's primary charter is to develop a Common Operating System to facilitate the integration of subsystems such as sensors, weapons, and communications. The COS is the software and the algorithms that provide for command and control, communications management, mission planning, much of the interactive autonomy, the human systems interface and the many other qualities associated with each of these. In addition, CST will develop a system architecture to ensure intra-operability between the internal components of J-UCAS and inter-operability with external elements such as manned aircraft, command and control centers, and space assets. Furthermore, CST will develop a single suite of sensors accompanied by common mission avionics, and software applications. Proposed Consortium Overview: In order to accomplish the development of the COS, the J-UCAS program office is seeking to foster a new business agreement. This proposed agreement will form a consortium among the program primes (Boeing and Northrop Grumman), technology contributors, and an integrator/broker. Program primes are key stakeholders that directly contribute software functionality to the COS and are exclusively responsible for integrating the COS onto their own platform. Technology contributors provide "best of breed" algorithms to the COS. Their involvement in the consortium is based on the specific potential contributions that may enhance the COS functionality. Technology providers can include small developers, other large defense contractors, as well as traditional sub-contractors. The integrator/broker role is intended to facilitate the COS integration process amongst the other potential consortium members. The integrator/broker is not envisioned to be a large scale integrator or a Lead System Integrator (LSI), and can have no other role in the consortium. Specific attributes required for the integrator/broker role are described in the next section. Integrator/broker Overview: A solicitation for the integrator/broker role will be released on or about 1 May 2004. A successful offeror in this role would consist of either a single organization or a teaming of organizations that are capable of the following: Acting as an honest broker within the consortium; Facilitating, coordinating, and (if necessary) completing the development of the J-UCAS enterprise architecture; Facilitating, coordinating, and (if necessary) completing development and integration of the COS; Developing and maintaining an executable J-UCAS architectural model; Providing available infrastructure to support technology identification and evaluation (e.g., Simulation, labs, etc.); Maintaining configuration control of Interface Control Documents (ICDs), executable models, and COS releases; Exhibiting domain knowledge expertise in the areas of sensors, communications, and real-time embedded systems; Applying their experience from developing and integrating large-scale, complex systems to support J-UCAS Common Operating System technical activities. The COS Industry Day will take place at the Executive Conference Center, Sixth Floor, One Virginia Square, 3601 Wilson Blvd, Arlington, VA. Attendance is limited to two (2) representatives per company. Registration for the Industry Day can be made on-line at <http://www.eventmakeronline.com/j-ucas/industryday/index.asp>. A \$35 registration fee will be required. Technical questions can be directed to Marc Pitarys, COS Program Manager, at [mpitarys@darpa.mil](mailto:mpitarys@darpa.mil) Business questions can be directed to Mark Bennington, J-UCAS Agreements Officer at (703) 696-2411.